

CLAIMS

We claim:

1. A kit for detecting RANKL protein, said kit comprising a RANKL polypeptide selected from the group consisting of:
 - a) a polypeptide comprising amino acids 1-317 of SEQ ID NO:13;
 - b) a polypeptide comprising amino acids 69-313 of SEQ ID NO:13;
 - c) a polypeptide comprising amino acids 162-313 of SEQ ID NO:13
 - d) a polypeptide comprising amino acids 138-317 of SEQ ID NO:13;
 - e) a polypeptide comprising amino acids x to y of SEQ ID NO:13, wherein x is an amino terminal amino acid between 69 and 162 of SEQ ID NO:13, and y is a carboxy terminal amino acid between 313 and 317 of SEQ ID NO:13; and
 - f) a polypeptide having an at least 90% amino acid sequence identity with a polypeptide comprising amino acids 162-317 of SEQ ID NO:13.
2. A kit according to claim 1, said kit further comprising a monoclonal antibody that binds specifically to a RANKL polypeptide consisting of amino acids 1-317 of SEQ ID NO:13.
3. A kit according to claim 1, wherein said kit is used with an assay format selected from the group consisting of ELISA and a solid phase binding assay.
4. A kit according to claim 1, wherein said detected RANKL protein is from a patient specimen.
5. A kit for detecting the presence of human RANKL nucleic acid in an *in vitro* assay, said kit comprising at least one fragment of DNA that comprises at least 17 nucleotides of SEQ ID NO:12 or that comprises at least 17 nucleotides complementary to SEQ ID NO:12.
6. A kit according to claim 5, wherein the detection method is polymerase chain reaction and the kit comprises a first fragment of DNA comprising at least 17 nucleotides of SEQ ID NO:12 and a second fragment of DNA comprising at least 17 nucleotides complementary to SEQ ID NO:12.
7. A kit according to claim 5, wherein the detection method is Northern blot or Southern blot.
8. A kit according to claim 5, wherein said detected human RANKL nucleic acid is from a patient specimen.

9. A kit for detecting RANKL protein, said kit comprising an antibody that specifically binds a human RANKL polypeptide, wherein said antibody is elicited by immunizing with a polypeptide comprising amino acids x to y of SEQ ID NO:13, wherein x is an amino terminal amino acid between 1 and 162 of SEQ ID NO:13 and y is a carboxy terminal amino acid between 313 and 317 of SEQ ID NO:13.
10. A kit according to claim 9, wherein said antibody is a monoclonal antibody.
11. A kit for detecting RANKL protein, said kit comprising an antibody that binds with higher affinity to a human RANKL protein comprising amino acids 1-317 of SEQ ID NO:13 than to a murine RANKL protein comprising amino acids 1-294 of SEQ ID NO:11.
12. A kit according to claim 11, wherein said antibody is a monoclonal antibody.